

Design-Build – Replacement of CHERRY VALLEY AVENUE BRIDGE



The age of the original bridge and number of vehicular bridge strikes made replacement a priority. The design used existing abutments, reduced the bridge length, and minimized operations impacts. Per design, the bridge was raised by almost 4', but the work to raise it occurred over 4 weekends. After each weekend, the track was placed back into service. On the 4th weekend, the bridge was removed and a new bridge was installed, with one final raise.

The work was done during limited weekend track closures, and many aspects of the project dealt with providing a design that could be accomplished under these limited time-frame conditions.

These produced many challenges to be addressed:

- New concrete stems and footings were placed in front of each of the abutments, connected together, to act as a unit to support the new span.
- New precast bridge seats with attached backwall and approach slabs were installed on top of the existing abutments during the final weekend closure.
- The new clearance of 14'-4" will eliminate the bridge's history of frequent vehicle collisions.
- During the four separate weekends to incrementally raise the bridge, new temporary supports and vehicular collision protection were provided for each stage during the weeks that the bridge was being raised.
- During the final weekend, the new bridge was rolled in, a task completed in a tight timeframe to reopen the LIRR tracks to train traffic after the weekend closure.
- This design-build project was completed ahead of schedule.



Project: Design-Build Replacement of
Cherry Valley Avenue Bridge
Garden City, NY

Client: **MTA** Construction & Development
New York, NY

Entrant: **KSE**
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